

PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference SHW:LM:FP17123	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).	
International Application No. PCT/AU02/01669	International Filing Date (day/month/year) 10 December 2002	Priority Date (day/month/year) 18 December 2001
International Patent Classification (IPC) or national classification and IPC Int. CL⁷ G01V 3/165, 3/38		
Applicant BHP BILLITON INNOVATION PTY LTD et al		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 3 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheet(s).</p>																	
<p>3. This report contains indications relating to the following items:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center; padding: 2px;">I</td> <td style="width: 90%; padding: 2px;"><input checked="" type="checkbox"/> Basis of the report</td> </tr> <tr> <td style="text-align: center; padding: 2px;">II</td> <td style="padding: 2px;"><input type="checkbox"/> Priority</td> </tr> <tr> <td style="text-align: center; padding: 2px;">III</td> <td style="padding: 2px;"><input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center; padding: 2px;">IV</td> <td style="padding: 2px;"><input type="checkbox"/> Lack of unity of invention</td> </tr> <tr> <td style="text-align: center; padding: 2px;">V</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center; padding: 2px;">VI</td> <td style="padding: 2px;"><input type="checkbox"/> Certain documents cited</td> </tr> <tr> <td style="text-align: center; padding: 2px;">VII</td> <td style="padding: 2px;"><input type="checkbox"/> Certain defects in the international application</td> </tr> <tr> <td style="text-align: center; padding: 2px;">VIII</td> <td style="padding: 2px;"><input type="checkbox"/> Certain observations on the international application</td> </tr> </table>		I	<input checked="" type="checkbox"/> Basis of the report	II	<input type="checkbox"/> Priority	III	<input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	IV	<input type="checkbox"/> Lack of unity of invention	V	<input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	VI	<input type="checkbox"/> Certain documents cited	VII	<input type="checkbox"/> Certain defects in the international application	VIII	<input type="checkbox"/> Certain observations on the international application
I	<input checked="" type="checkbox"/> Basis of the report																
II	<input type="checkbox"/> Priority																
III	<input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability																
IV	<input type="checkbox"/> Lack of unity of invention																
V	<input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																
VI	<input type="checkbox"/> Certain documents cited																
VII	<input type="checkbox"/> Certain defects in the international application																
VIII	<input type="checkbox"/> Certain observations on the international application																

Date of submission of the demand 19 June 2003	Date of completion of the report 16 July 2003
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer MICHAEL HALL Telephone No. (02) 6283 2474

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/AU02/01669

I. Basis of the report

1. With regard to the elements of the international application:*

the international application as originally filed.

the description, pages , as originally filed,
pages , filed with the demand,
pages , received on with the letter of

the claims, pages , as originally filed,
pages , as amended (together with any statement) under Article 19,
pages , filed with the demand,
pages , received on with the letter of

the drawings, pages , as originally filed,
pages , filed with the demand,
pages , received on with the letter of

the sequence listing part of the description:
pages , as originally filed
pages , filed with the demand
pages , received on with the letter of

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

the language of publication of the international application (under Rule 48.3(b)).

the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

contained in the international application in written form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. The amendments have resulted in the cancellation of:

the description, pages

the claims, Nos.

the drawings, sheets/fig.

5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/AU02/01669

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1-36	YES
	Claims	NO
Inventive step (IS)	Claims 1-36	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-36	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)

Citations

D1 : US 3875497

D2 : US 5218300

NOVELTY (N) AND INVENTIVE STEP (IS)

The claims are directed to methods of directly correcting marine magnetic gradient data for ship bias, by determining and subtracting the trend of the gradient of the ship bias. D1 discloses a method of towing two spaced apart sensors behind a waterborne vessel to obtain marine magnetic data, but does not teach or suggest any correction for ship bias. D2 discloses removing noise from fixed magnetic sensors used for detection of submarines, in which magnetic gradients are subtracted, but does not teach or suggest how towed magnetic sensors could be corrected for ship bias. Hence the claims are novel and inventive over the prior art.

INDUSTRIAL APPLICABILITY (IA)

The subject matter of the claims is applicable to marine exploration based on magnetic gradient data.